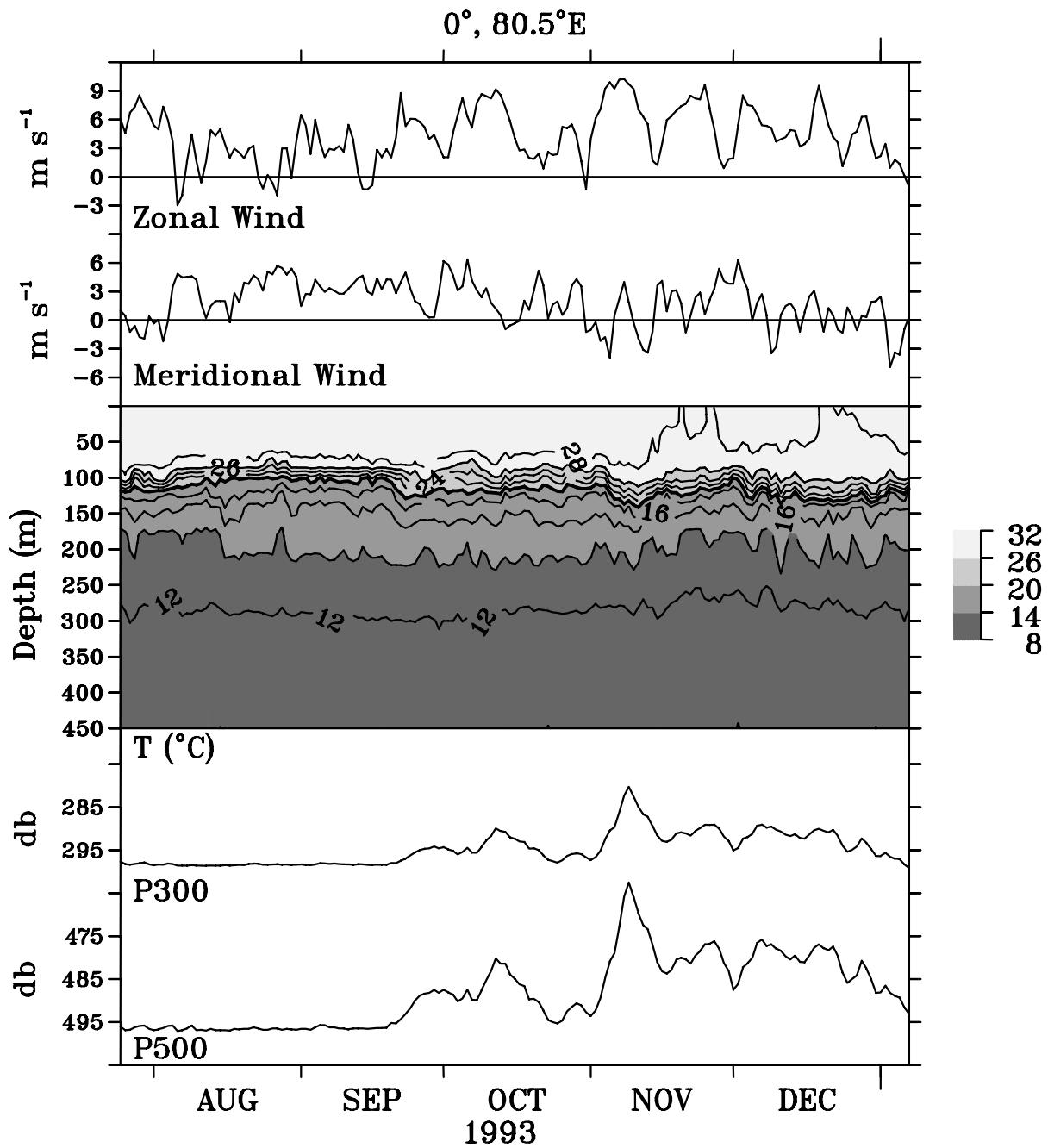


APPENDIX A

0°, 80.5°E



	<u>Mean</u>	<u>Std. Dev.</u>	<u>Min.</u>	<u>Max.</u>
P300	295.	3.8	280.	299.
P500	488.	8.1	462.	497.

Fig. A1. $0^\circ, 80.5^\circ\text{E}$. Time series plots of zonal wind velocity, meridional wind velocity, contoured time series of remapped temperatures, and time series of 300-m (P300) and 500-m (P500) pressure sensor values. The 300-m pressure values were subject to adjustments described in the text.

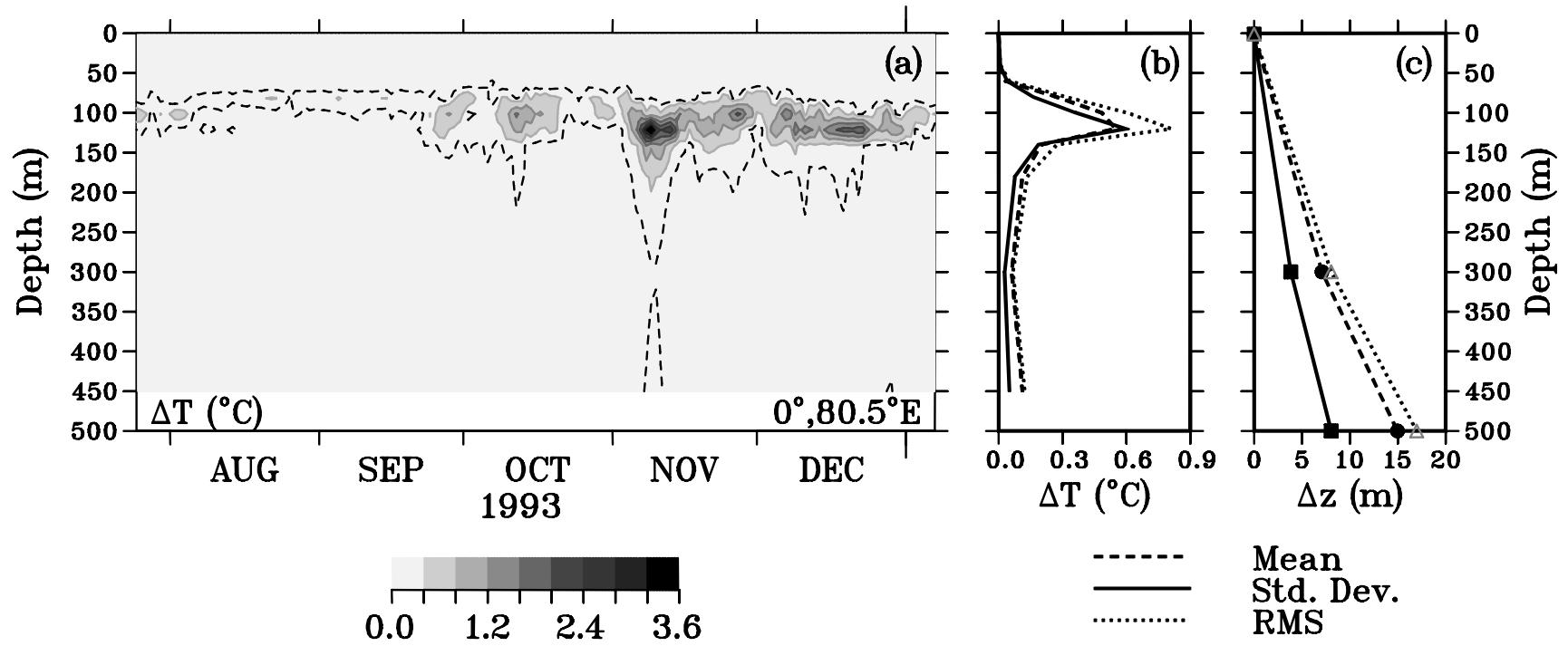
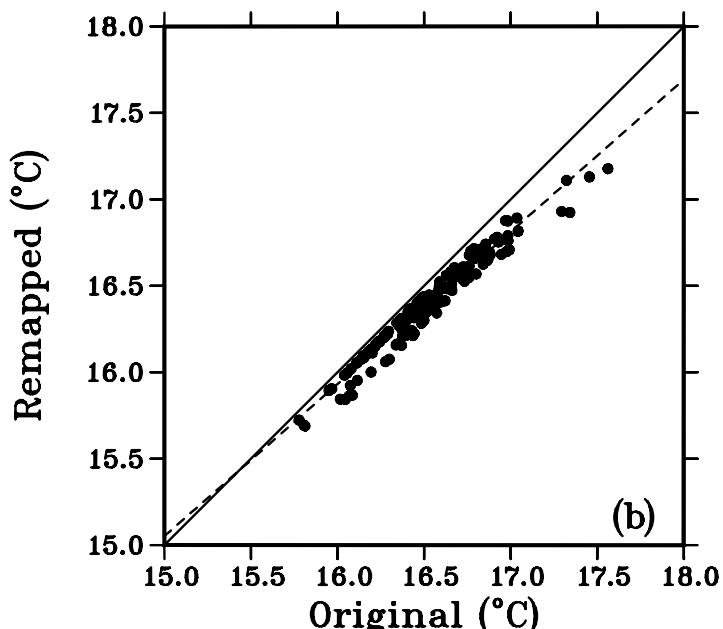
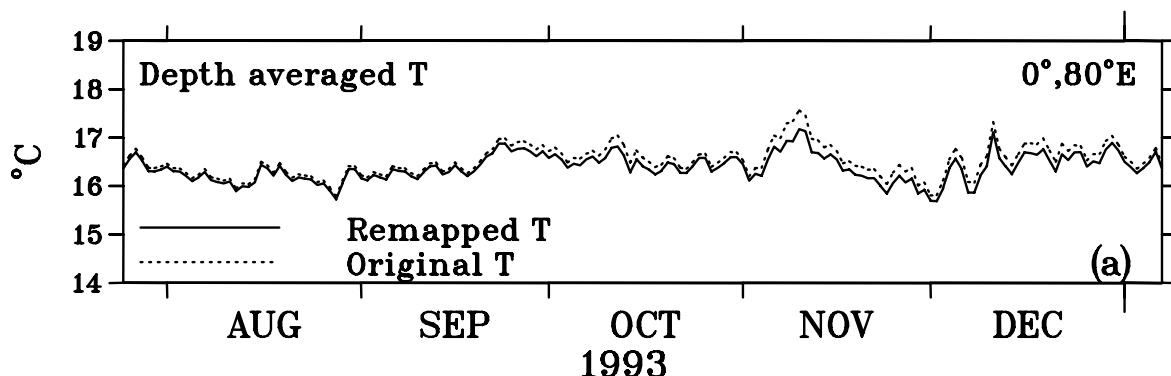


Fig. A2. 0°, 80.5°E. (a) Contoured time series of original temperatures minus remapped temperatures (ΔT). Shading interval is 0.4 °C. Dashed line is the 0.2 °C contour. (b) Profiles of mean (dashed line), standard deviation (solid line), and RMS (dotted line) ΔT . (c) Profiles of mean (dashed line), standard deviation (solid line), and RMS (dotted line) sensor vertical displacement (Δz). Symbols indicate the nominal depths of the pressure sensors.

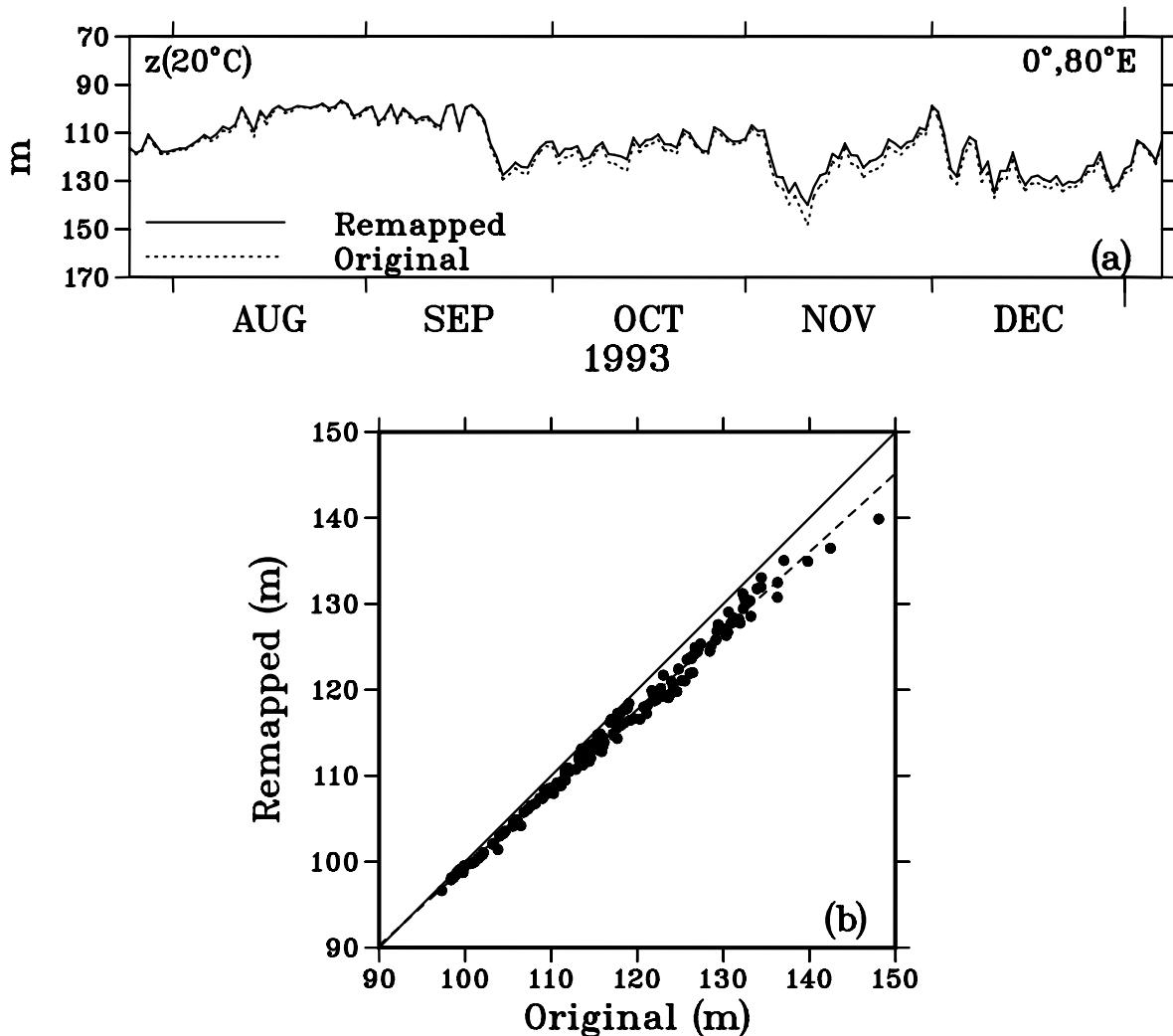


FROM 0000 25 JUL 93 TO 0000 7 JAN 94

	MIN	MAX	MEAN	STD DEV
x:	15.778	17.562	16.516	0.317
y:	15.689	17.177	16.386	0.280

n: 167 r: 0.98
 $y = a + bx$: a = 1.85 , b = 0.880 (Orth)
 Difference: RMS = 0.15, Mean = -0.13

Fig. A3. 0° , 80.5°E , 0 to 450-m depth-averaged temperatures (T) calculated from original temperatures and from remapped temperatures. (a) Time series. Dotted line is T from original temperatures; solid line is T from remapped temperatures. (b) Scatter plot with T from original temperatures as the x coordinate and T from remapped temperatures as the y coordinate. The solid line is the 1:1 fit; the dashed line is the linear least squares fit where the intercept a and the slope b have been derived from orthogonal regression. The number of points in the regression is n ; the correlation coefficient is r .

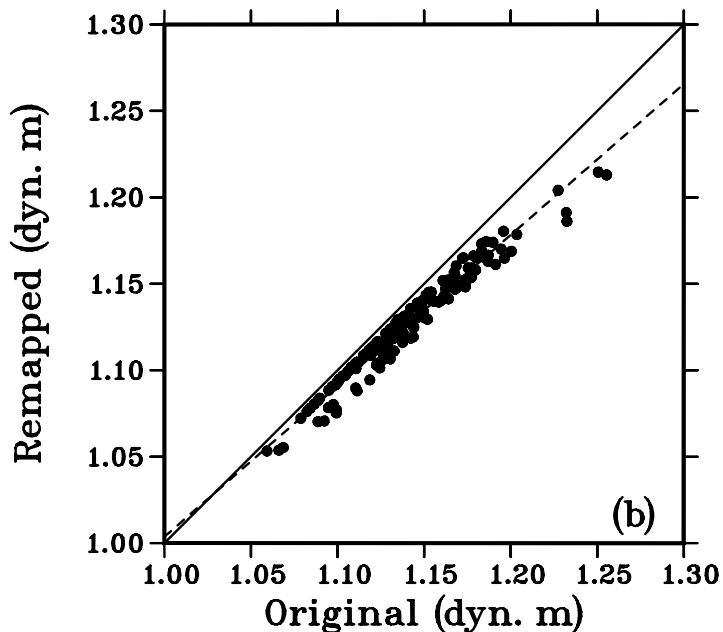
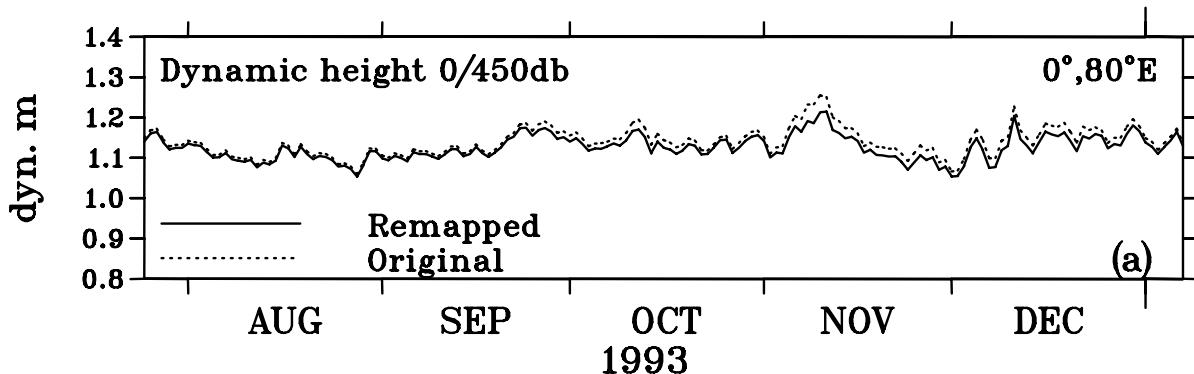


FROM 0000 25 JUL 93 TO 0000 7 JAN 94

	MIN	MAX	MEAN	STD DEV
x:	97.29	148.07	116.74	11.09
y:	96.63	139.87	114.72	10.15

n: 167 r: 1.00
 $y = a + bx$: a = 7.83 , b = 0.916 (Orth)
 Difference: RMS = 2.42, Mean = -2.02

Fig. A4. 0° , 80.5°E , 20°C isotherm depth ($z(20^\circ\text{C})$) calculated from original temperatures and from remapped temperatures. (a) Time series. Dotted line is $z(20^\circ\text{C})$ from original temperatures; solid line is $z(20^\circ\text{C})$ from remapped temperatures. (b) Scatter plot with $z(20^\circ\text{C})$ from original temperatures as the x coordinate and $z(20^\circ\text{C})$ from remapped temperatures as the y coordinate. The solid line is the 1:1 fit; the dashed line is the linear least squares fit where the intercept a and the slope b have been derived from orthogonal regression. The number of points in the regression is n ; the correlation coefficient is r .



FROM 0000 25 JUL 93 TO 0000 7 JAN 94

	MIN	MAX	MEAN	STD DEV
x:	1.059	1.255	1.139	0.035
y:	1.053	1.215	1.125	0.030

n: 167 r: 0.98
 $y = a + bx$: a = 0.131, b = 0.873 (Orth)
 Difference: RMS = 0.02, Mean = -0.01

Fig. A5. 0° , 80.5°E , 0 to 450-db dynamic height calculated from original temperatures and from remapped temperatures. (a) Time series. Dotted line is dynamic height from original temperatures; solid line is dynamic height from remapped temperatures. (b) Scatter plot with dynamic height from original temperatures as the x coordinate and dynamic height from remapped temperatures as the y coordinate. The solid line is the 1:1 fit; the dashed line is the linear least squares fit where the intercept a and the slope b have been derived from orthogonal regression. The number of points in the regression is n ; the correlation coefficient is r .